

# Beginning Vegetable Operations: The First Five Years

Fruit and Vegetable Working Group  
ISU Value Added Agriculture Program

Project funded by:  
Leopold Center for Sustainable Agriculture  
Margaret Smith, PhD

Value Chain



Partnerships

*An Iowa-Based Network for Food  
and Agriculture Working Groups*



# Start-up Vegetable Operations

What is the potential?





# Start-up Vegetable Operations

**Subjects:** Six upper-Midwest produce farms/farmers

**Timeline:** Four to six years farming, through 2008

**Information:** Qualitative and quantitative

**Summary:** Web-based document





# Start-up Vegetable Operations

## Quantitative data

- Capital start-up costs
- Costs of production each year
- Vegetable sales
- Labor inputs
- Capital purchases over time
- Access to markets
- Vegetable income as percent of total income

## Qualitative data: personal interviews

- Why?
- Farming and educational background
- Lessons learned
- Advice for other beginners



# Start-up Vegetable Operations

Data Presentation: Farms A, B, C, D, E, F





# Six Upper-Midwestern Vegetable Farms: **General Characteristics**

**Farm size:** 1.5 to 80 acres

**Farm tenure:**

- 3 own their land
- 2 rent their land
- 1 farm both owns and rents

**Farm enterprises:**

- 2 are vegetables only
- 3 are vegetable/livestock mix
- 1 is vegetable/livestock/timber mix



# Six Upper-Midwestern Vegetable Farms: **General Characteristics**

- 2 certified organic
- 1 organic practices, not certified
- 2 chemical-free, sustainable
- 1 chemical use, IPM practices





# Six Upper-Midwestern Vegetable Farms: **Capital**

- Start-up capital ranged from \$0 to \$50,000
  - Mixed cash and livestock equity
  - Borrowed from savings and repaid
- Off-farm income for all farms  
for at least first four years



# Six Upper-Midwestern Vegetable Farms: **Characteristics of Farmers**

## **Education and experience:**

- Ranging from 2-year tech degrees to post-grad degrees
- All had other work experience outside of agriculture
- Two are from farms
- None are from vegetable farms



# Marketing Outlets

	FARM					
<b>Wholesale</b>	<b>A</b>	-----	-----	<b>D</b>	<b>E</b>	<b>F</b>
<b>Direct</b>						
<b>CSA</b>	<b>A</b>	<b>B</b>		<b>D</b>	<b>E</b>	<b>F</b>
<b>Farmers' Market</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>Farm Stand</b>	<b>A</b>	-----	-----	-----	-----	-----



# Farm A

- Couple
- Two part-time, off-farm jobs
- Ages: mid-30s to 40
- Enterprises: vegetable

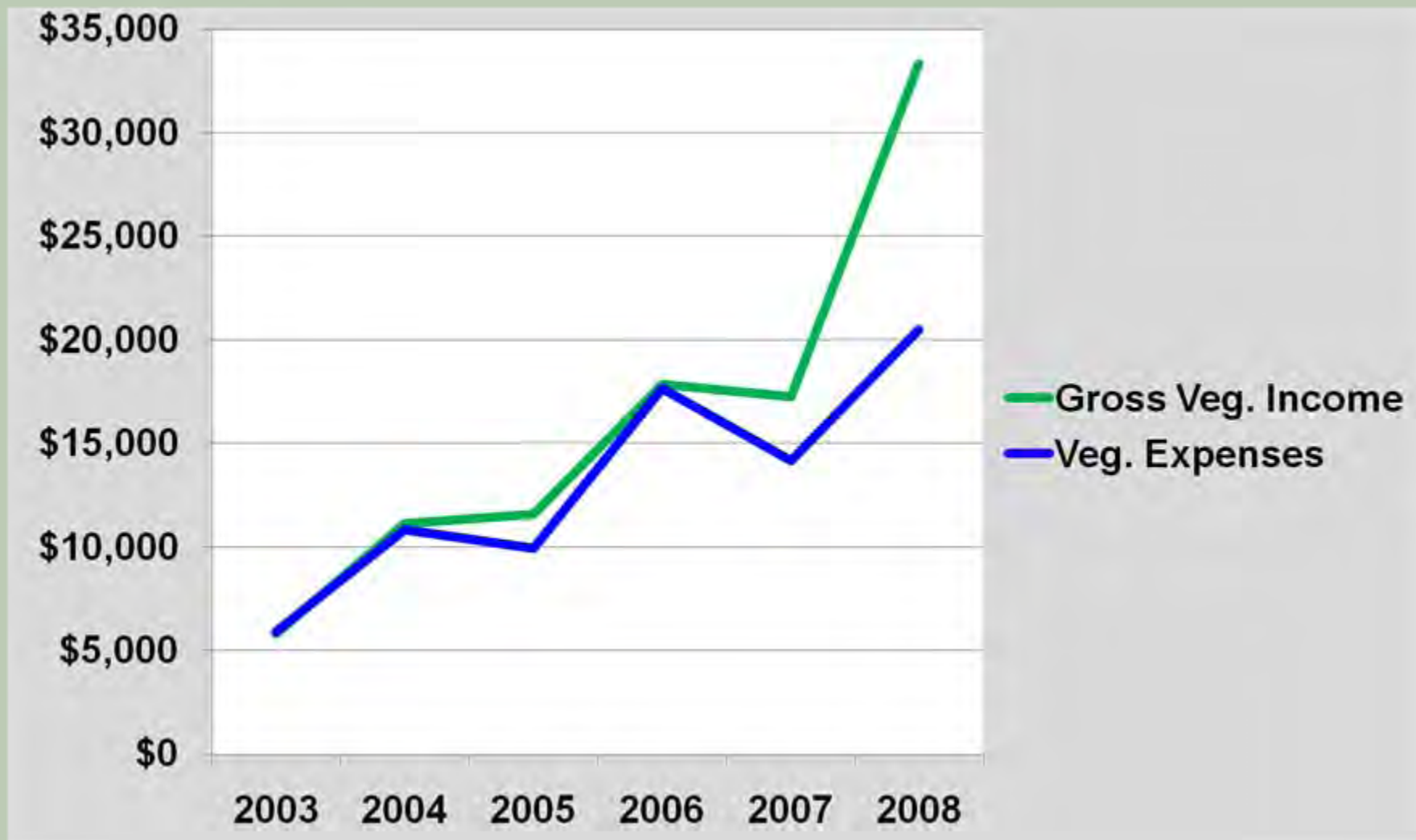


# Farm A: Gross Sales, Expenses, & Vegetable Income



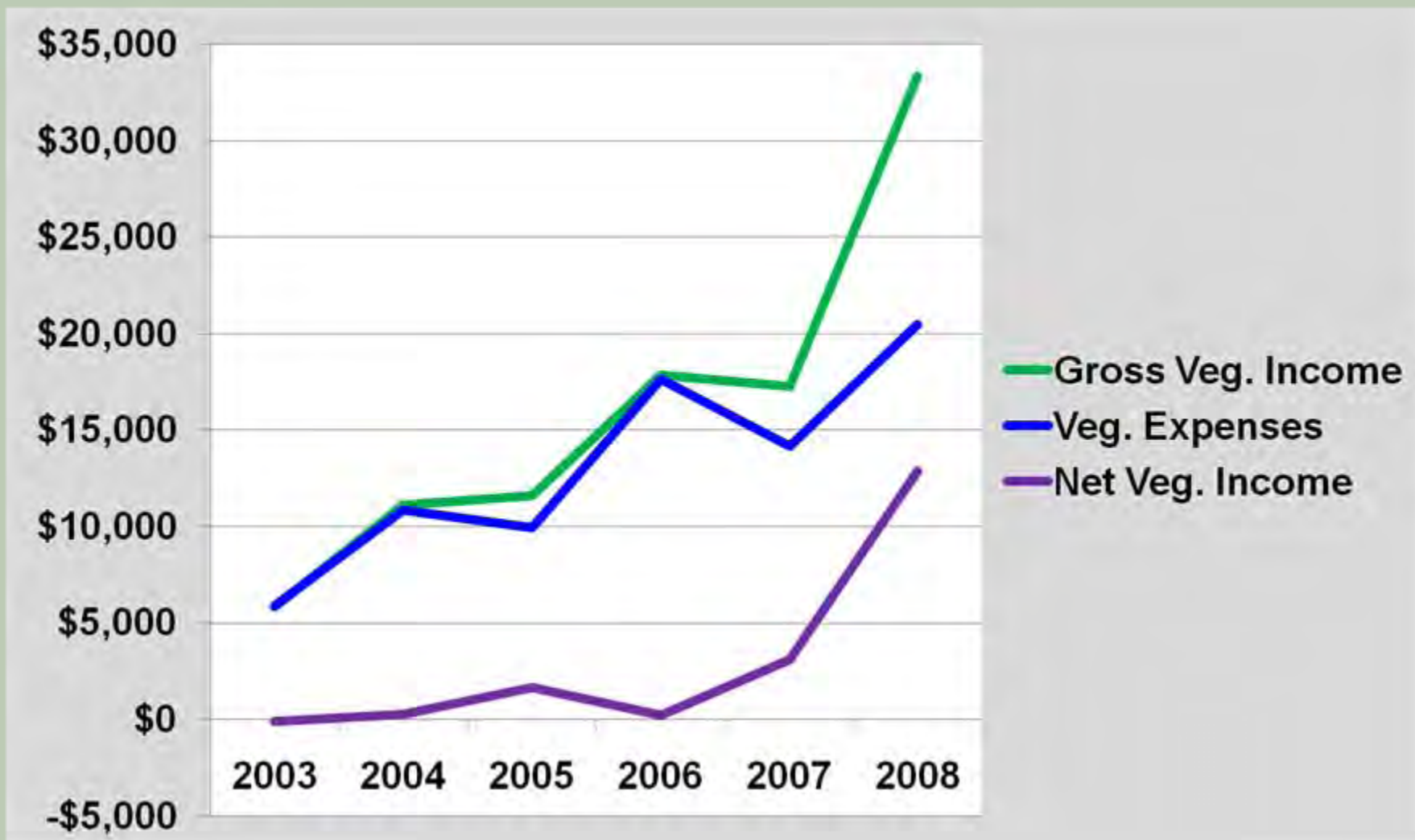


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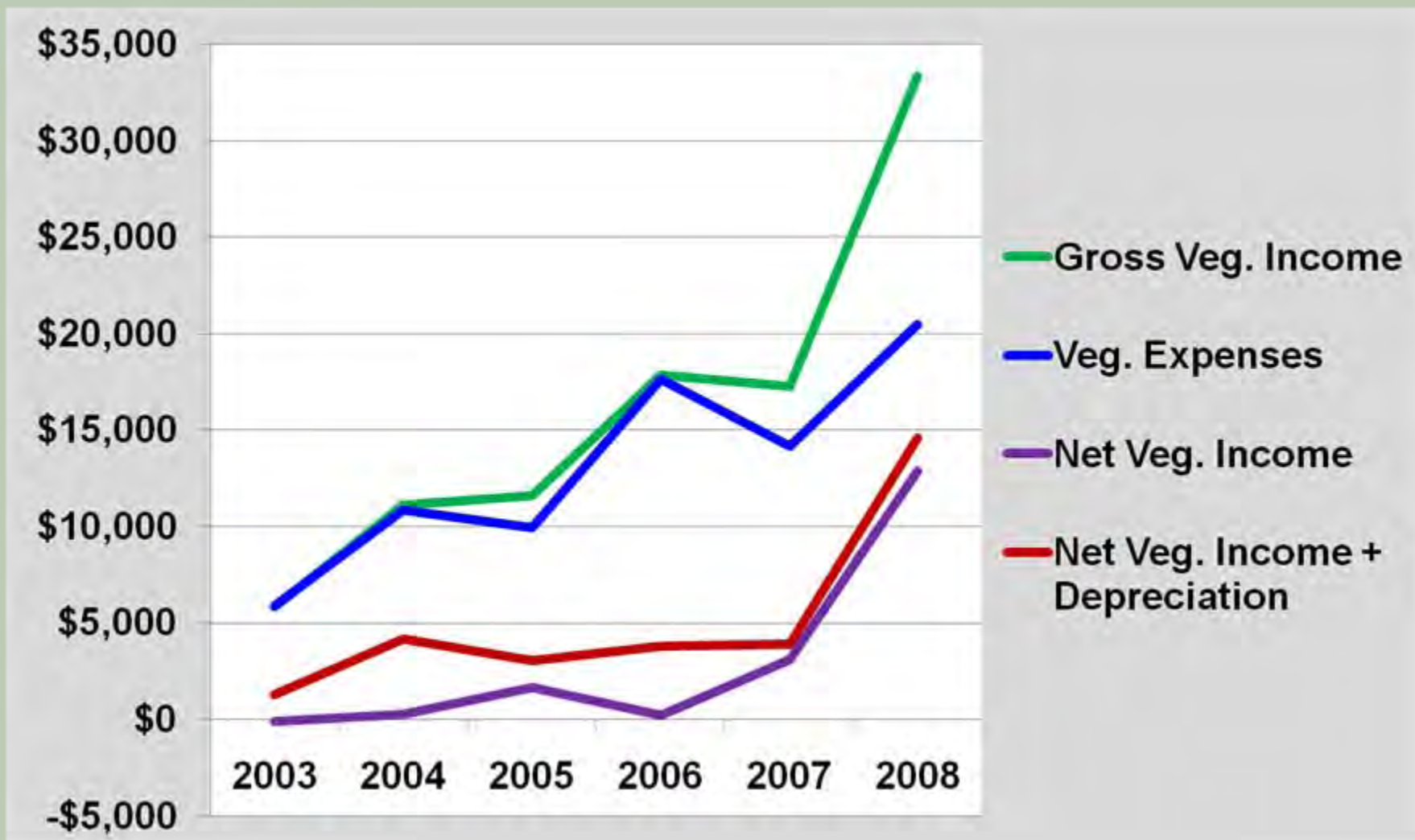


# Farm A: Gross Sales, Expenses, & Vegetable Income





# Farm A: Gross Sales, Expenses, & Vegetable Income



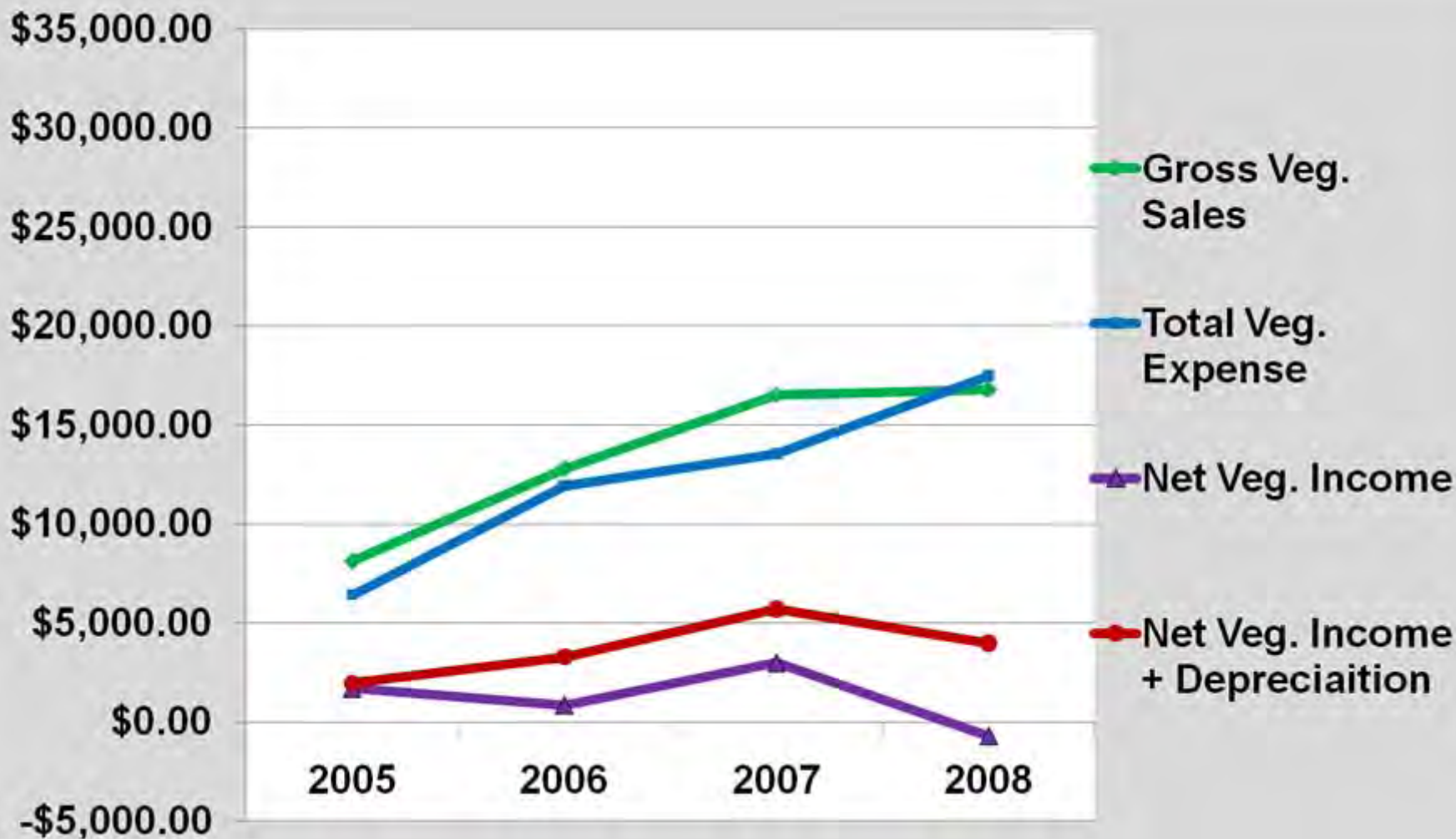


# Farm B

- Two farmers
- Part-time, off-farm employment
- Ages: 40ish
- Enterprises: vegetables, forage crops



# Farm B: Gross Sales, Expenses, & Vegetable Income





# Farm B: Capital Purchases

## CAPITAL PURCHASES

Item	Purchase Price \$	2,005 \$	2,006 \$	2,007 \$	2,008 \$
fax machine	94	94			
electric service to garden	170	170			
JD#5 mower	125	125			
refridgerator	80	80			
bee equipment 2005	328	328			
fencing 2005	858	858			
irrigation system 2005	322	322			
coop	627	627			
greenhouse	2,785	2,785			
laser printer	299		299		
bee equipment 2006	1,153		1,153		
rainwater capture 2006	467		467		
fencing 2006	753		753		
hightunnel	3,579		3,579		
software - MS Office	223		223		
electric to cooler	664		664		



## CAPITAL PURCHASES

## Farm B: Capital Purchases

Item	Purchase Price \$	2,005 \$	2,006 \$	2,007 \$	2,008 \$
elec&water to HT	936			936	
irrigation system 2007	1,516			1,516	
JD#8020 mo-co	4,000			1,000	1,000
fencing 2007	393			393	
cargo van	8,126			8,126	
Snapper mower	253			253	
JD#4020 tractor	7,800			7,800	
laptop	1,098				1,098
irrigation system 2008	105				105
fencing 2008	1,125				1,125
spinning wheel	911				911
HT replacement	4,506				4,506
Giant HT	6,331				6,331
projected future irrigation					
projected future fencing					
projected packing shed & equip					
projected future greenhouse					
<b>Total</b>	<b>49,626</b>	<b>7,394</b>	<b>9,144</b>	<b>22,031</b>	<b>17,084</b>

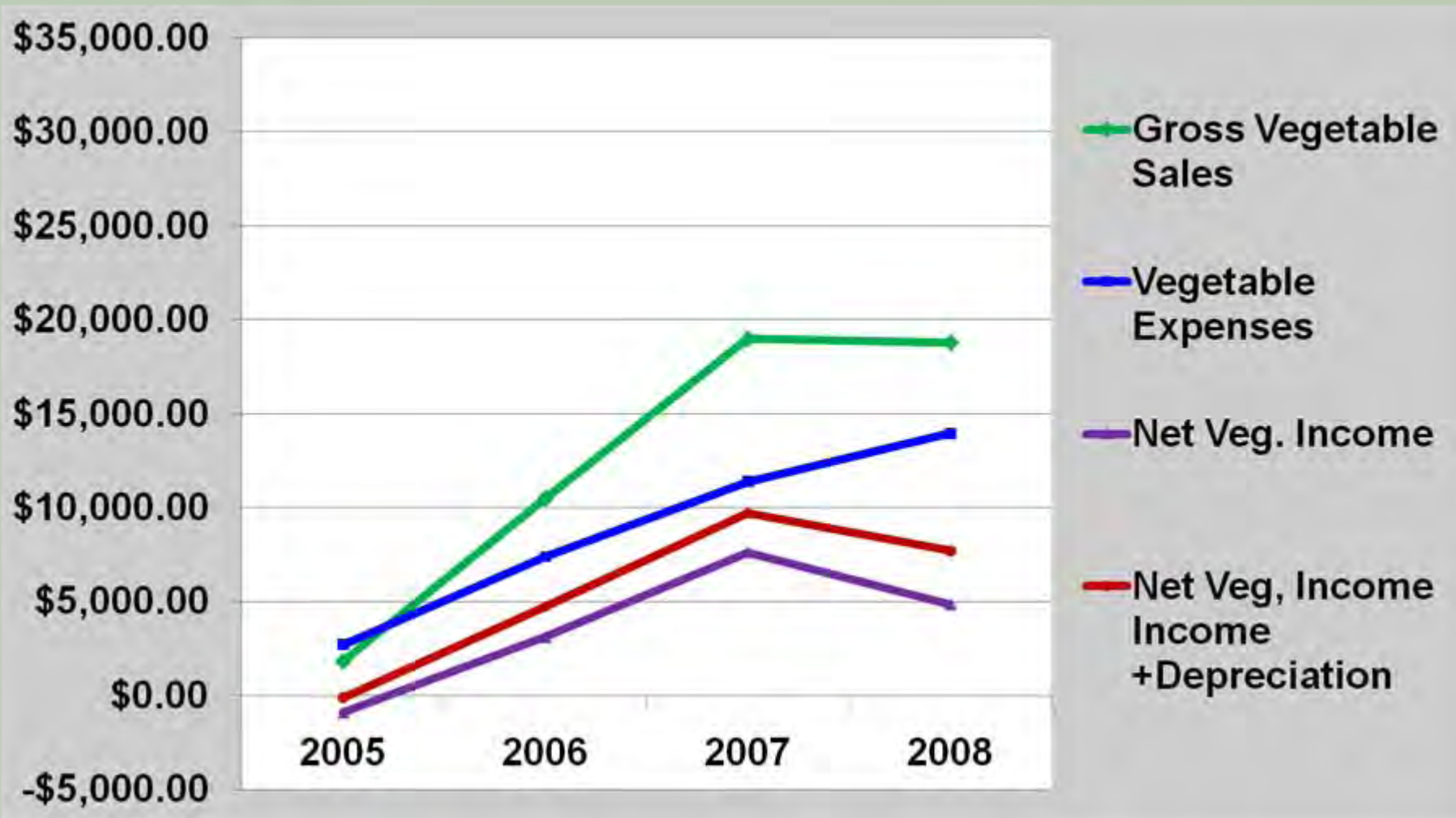


# Farm C

- Couple
- One off-farm job, also works on farm
- Ages: mid-30s to 40ish
- Enterprises: vegetables, other livestock

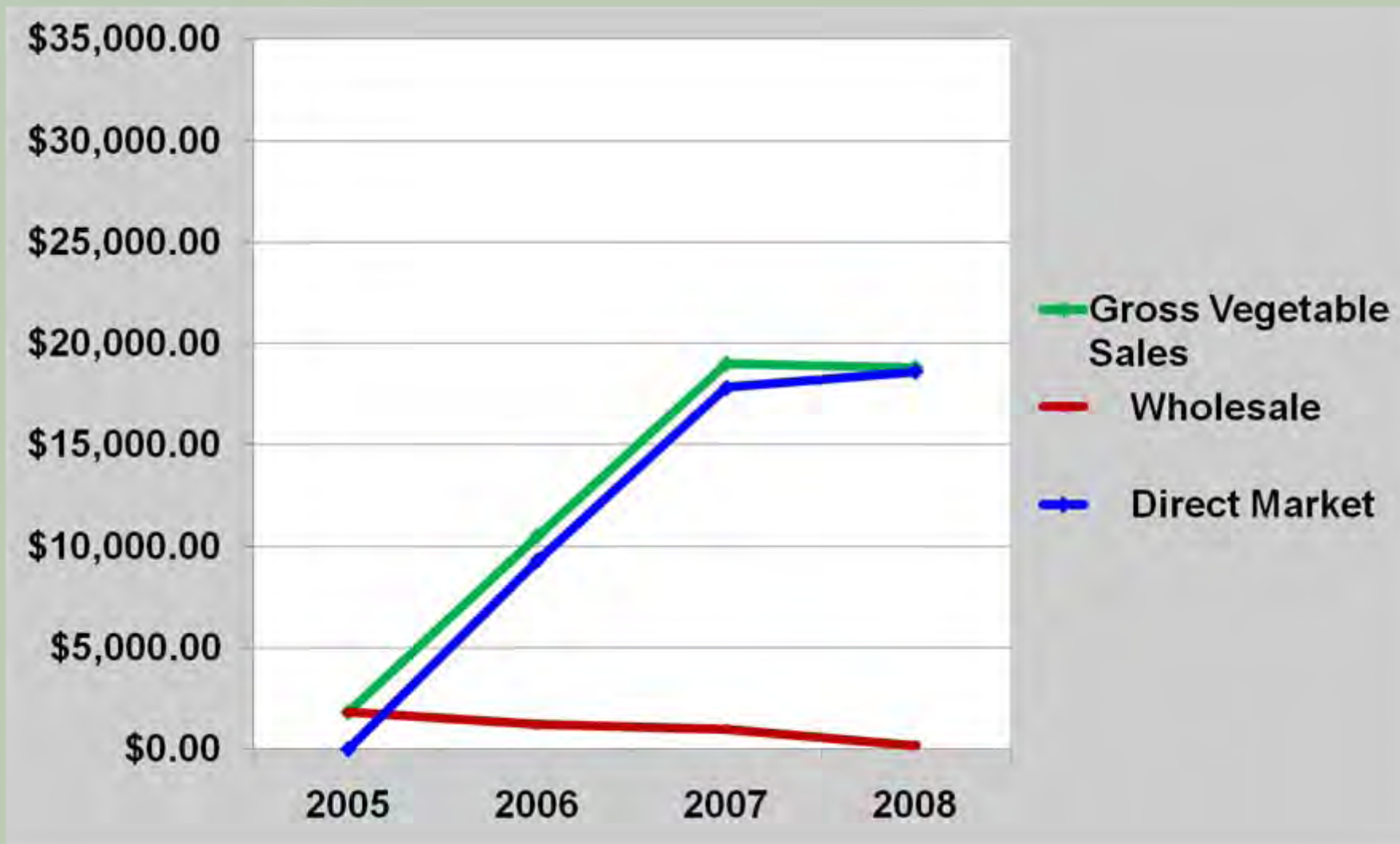


# Farm C: Gross Sales, Expenses, & Vegetable Income





# Farm C: Changes in Markets



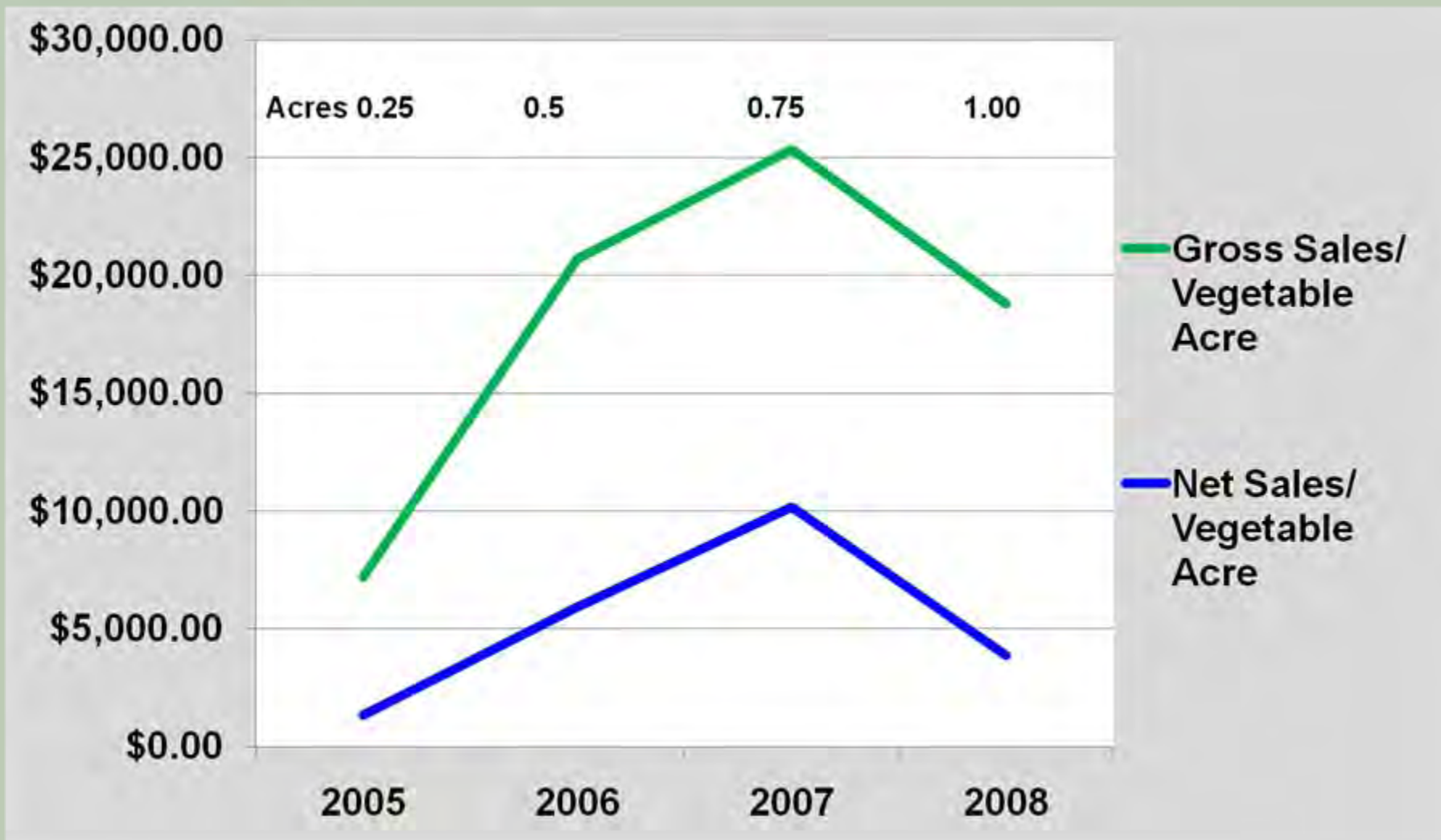


# Farm C: Capital Purchases

CAPITAL PURCHASES	Purchase price	towards		2005	2006	2007	2008
		veg					
Item	\$	%	\$	\$	\$	\$	\$
lawn mower	230	25	58				
weed eater	120	25	30				
used tiller	75	100	75				
used tractor	5,000	15	750				
used refrigerator	40	50	20				
used refrigerator	75	50	38				
new two wheeled tractor BCS	3,700	100		3,700			
3 pt. rotary mower	500	15		75			
office computer	880	25		220			
10 X 20 green house	700	100				700	
new refrigerator	620	50				320	
plow	400	100					620
sink	400	100					400
heater	160	100					160
garage remodel for processing	3,200	100					3,200
four wheeler	3,500	25					875
<b>Total</b>	<b>19,600</b>		<b>971</b>	<b>3,995</b>	<b>1,020</b>	<b>5,255</b>	



# Farm C: Gross and Net Sales/Acre



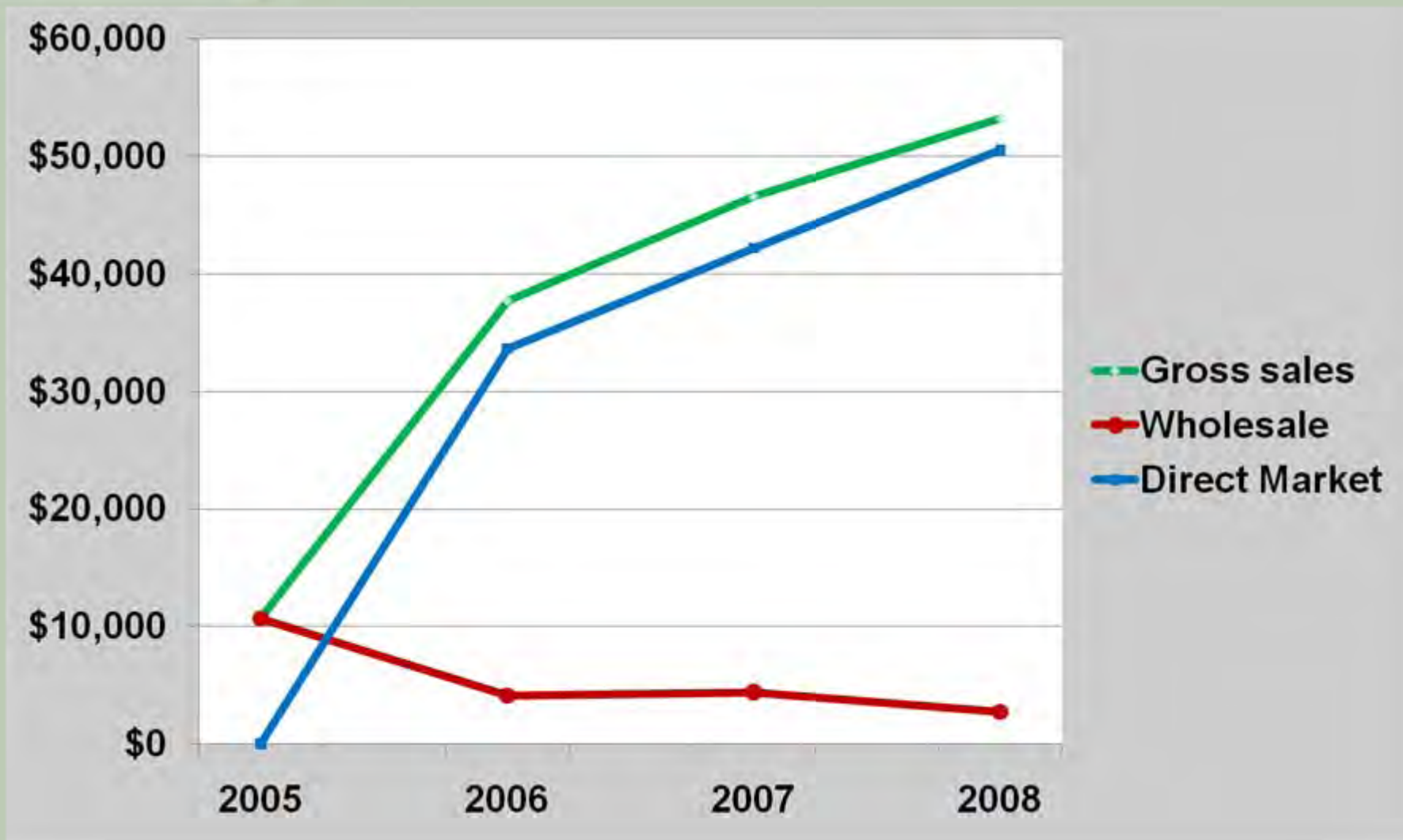


# Farm D

- Couple
- One off-farm job, also works on farm
- Ages: 30ish
- Enterprises: vegetables

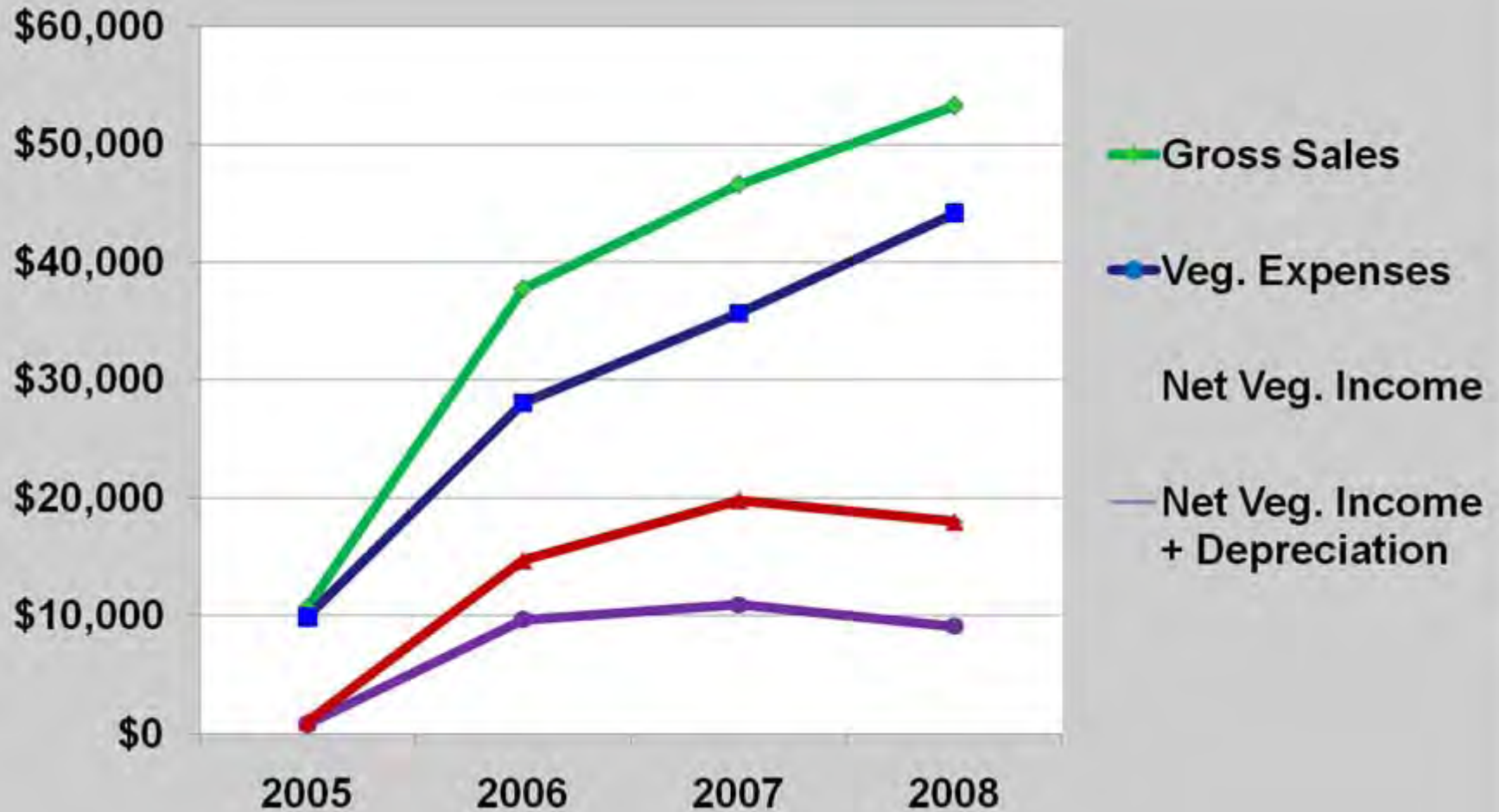


# Farm D: Changes in Markets





# Farm D: Gross Sales, Expenses, & Vegetable Income





# Farm D: Gross and Net Sales/Acre





# Farm D: Capital Purchases

## CAPITAL PURCHASES

	2005	2006	2007	2008
	NEW PURCHASES	NEW PURCHASES	NEW PURCHASES	NEW PURCHASES
Garden Tiller	\$666			
Small Cooler		\$1,800		
JD 2640 Tractor		\$9,500		
IH 140 Tractor		\$3,000		
Fertilizer Sidedresser		\$75		
Rototiller (new)		\$1,250		
Hefty G Tractor			\$1,750	
18" Disc (new)			\$830	
IH 140 Cultivating Parts			\$200	
Large Cooler Compressor			\$500	
Chisel Plow			\$350	
Spring Tine Weeder			\$450	
Planet Jr. Seeders			\$1,639	
Bed Lifter				\$300
Field Cultivator				\$450
Field Disc				\$300
Basket Weeder Cultivator				\$2,809
Drag				\$210
Electric Tractor Componets				\$1,705
Cultivating Parts				\$227
Hoophouse				\$5,713
WD40 Tractor				\$2,500
WD40 Tractor Implements				\$500
JD Lawn Tractor				\$1,000
Flail Mower				\$2,500
Potato Digger				\$400
Irrigation Pump				\$800
Farm Downpayment				\$15,000
Total Capital Assets	\$666	\$16,291	\$22,010	\$56,424

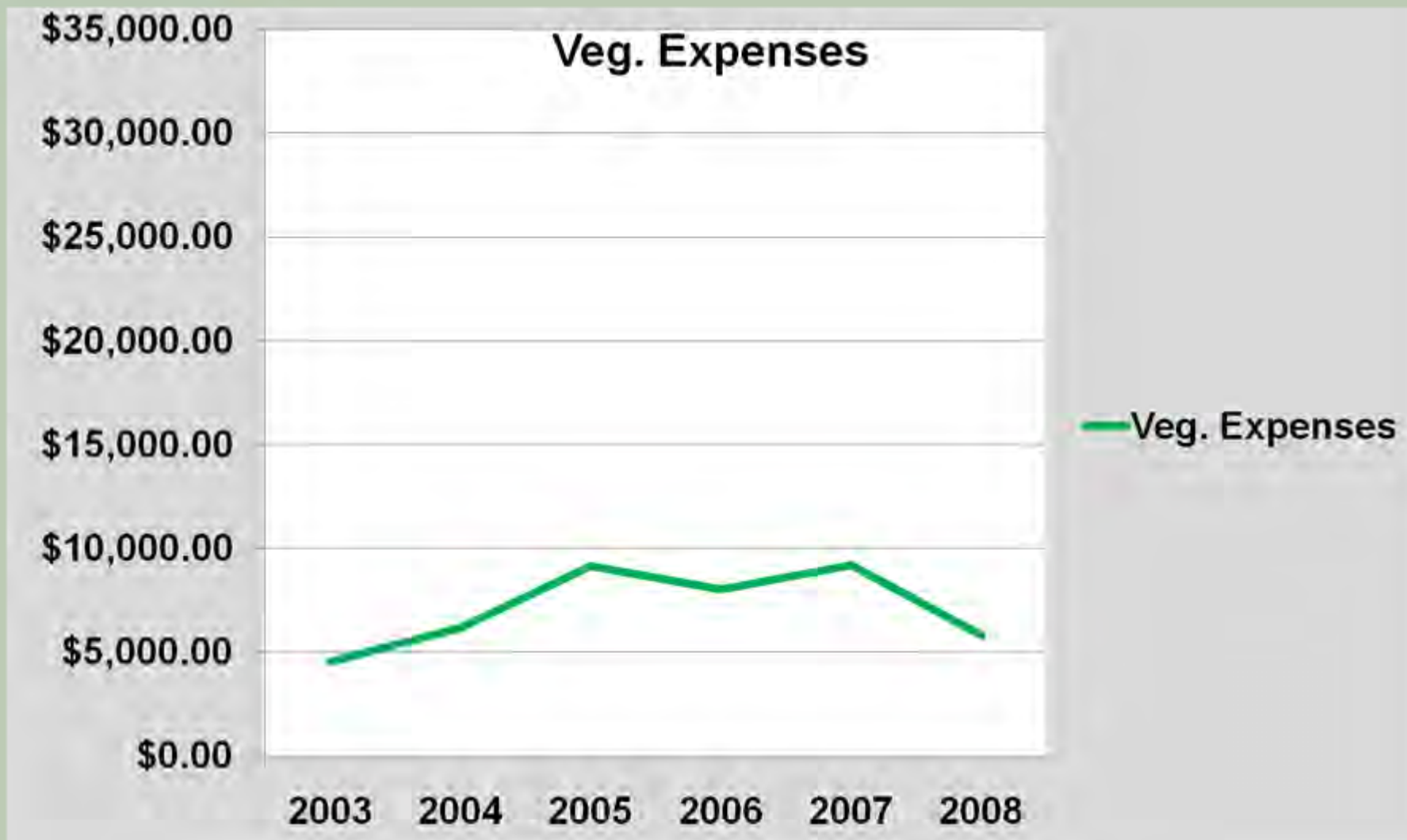


# Farm E

- Single farmer
- Part-time, off-farm employment until 2007
- Ages: mid-40s
- Enterprises: vegetables, poultry (eggs and meat)

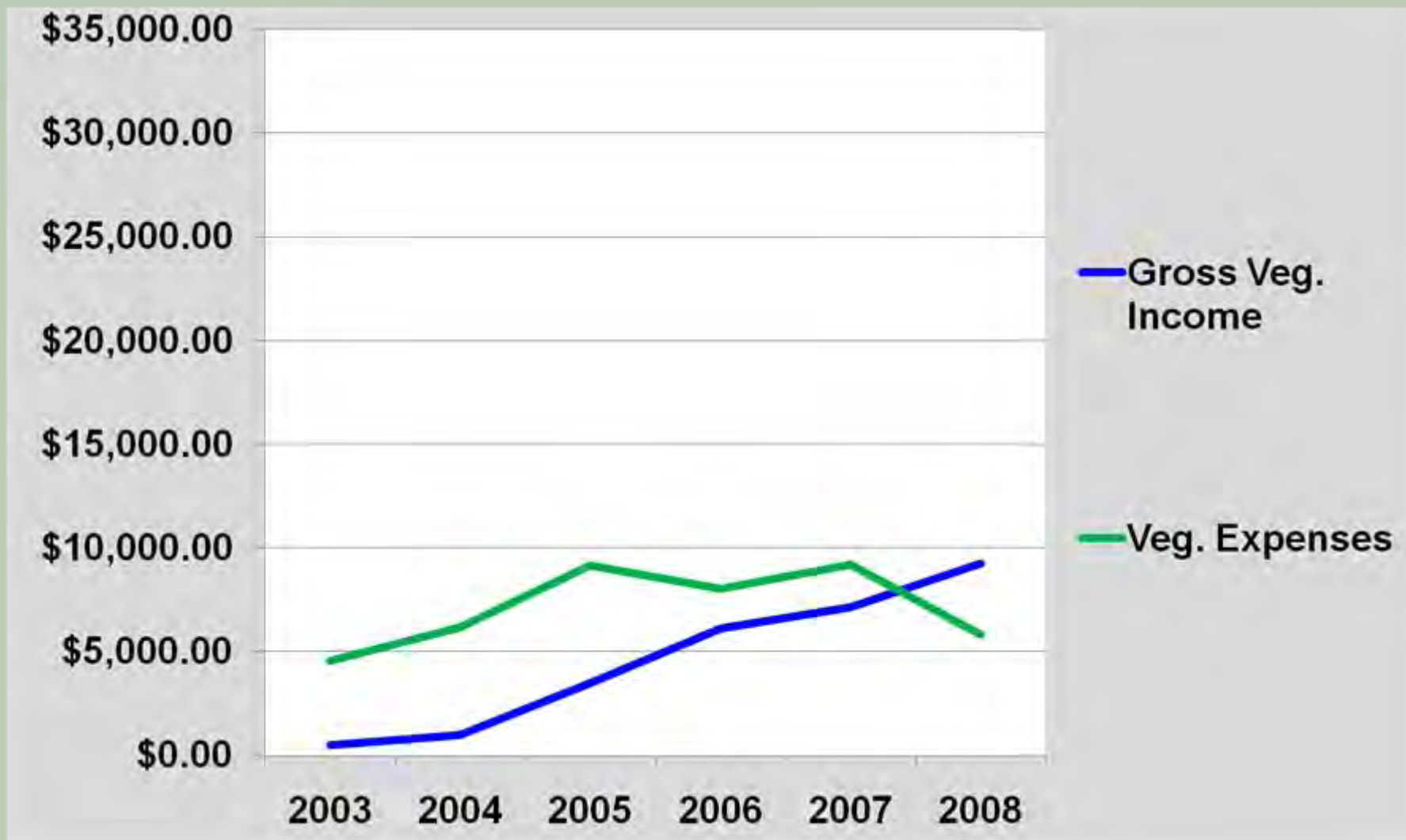


# Farm E: Gross Sales, Expenses, & Vegetable Income



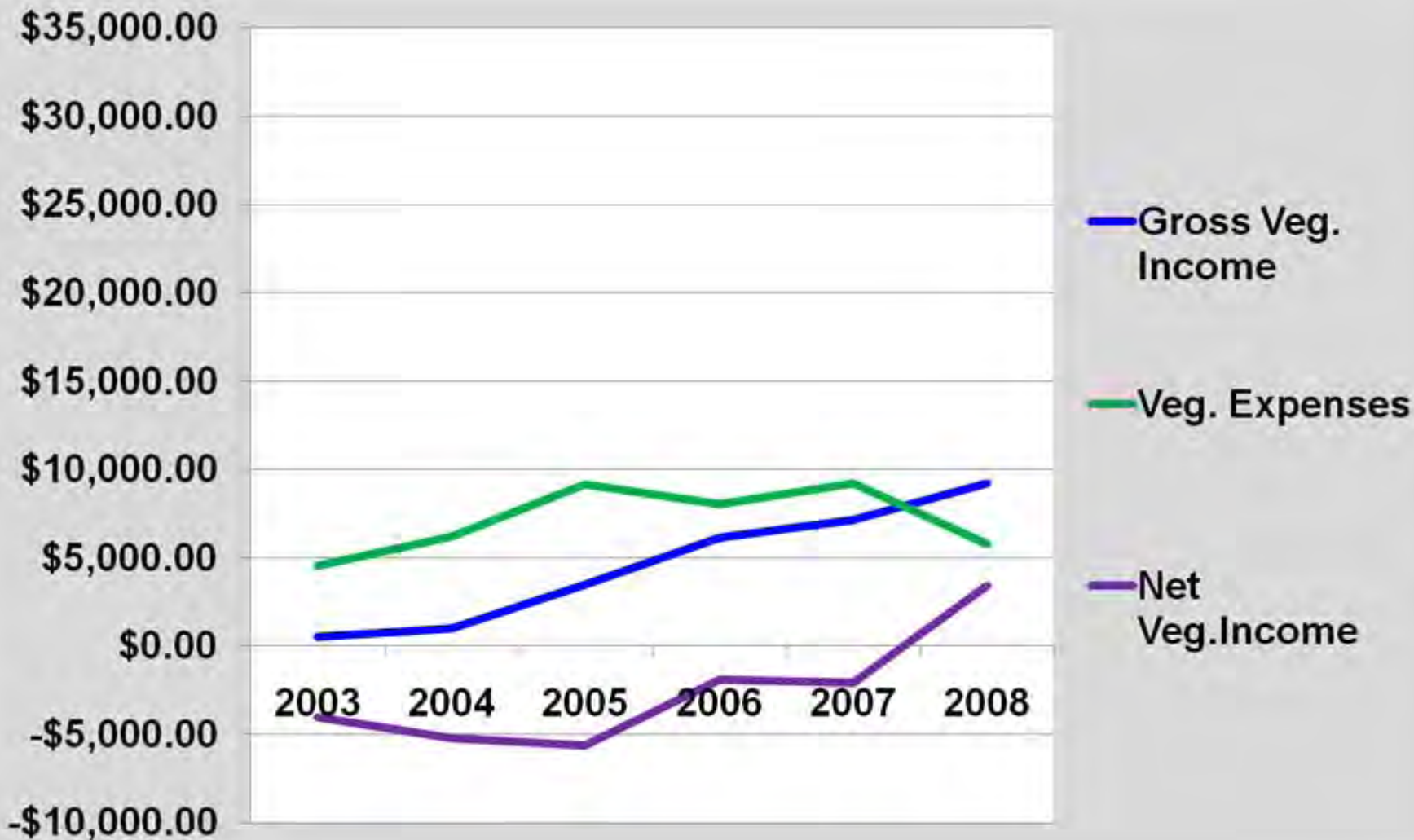


# Farm E: Gross Sales, Expenses, & Vegetable Income



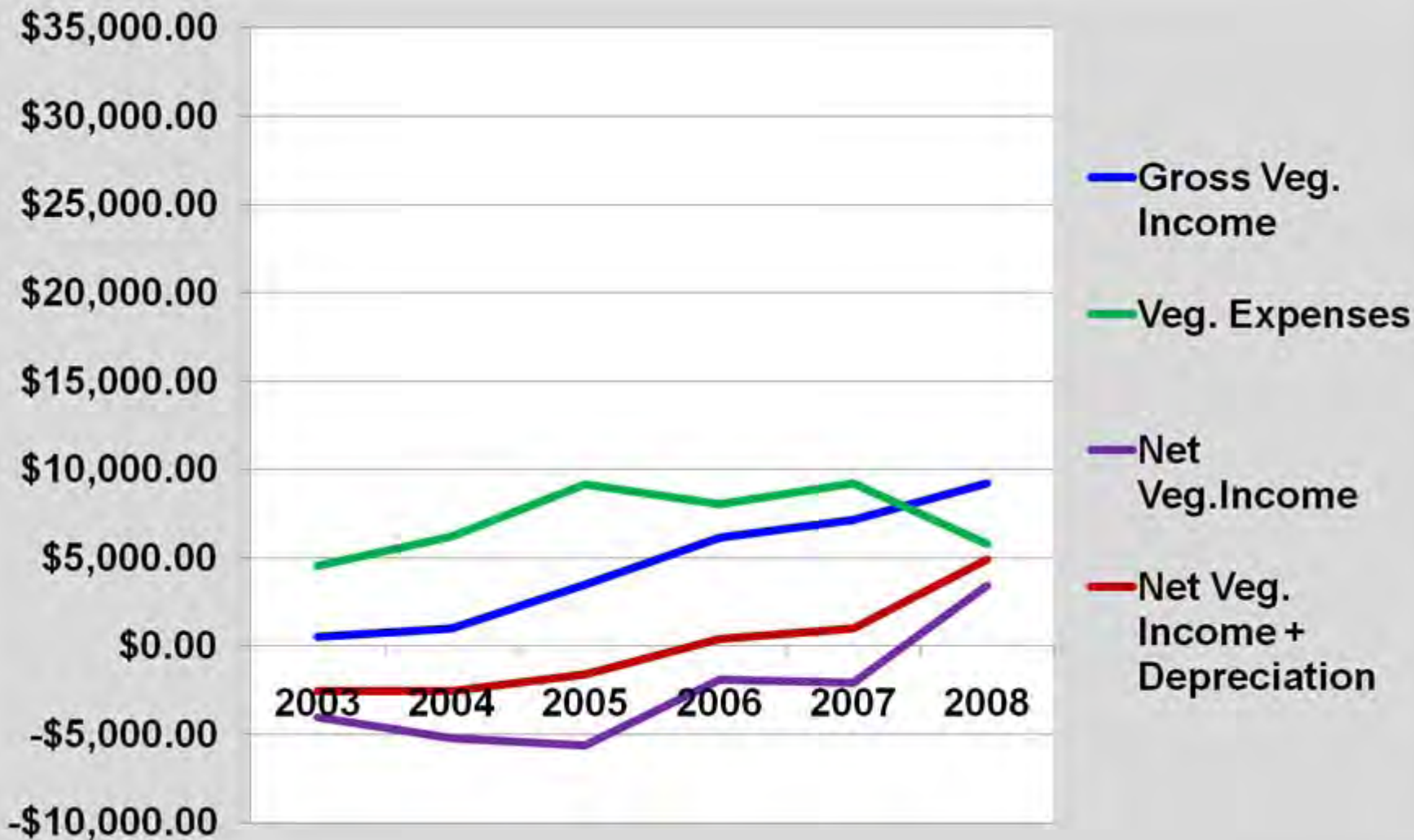


# Farm E: Gross Sales, Expenses, & Vegetable Income



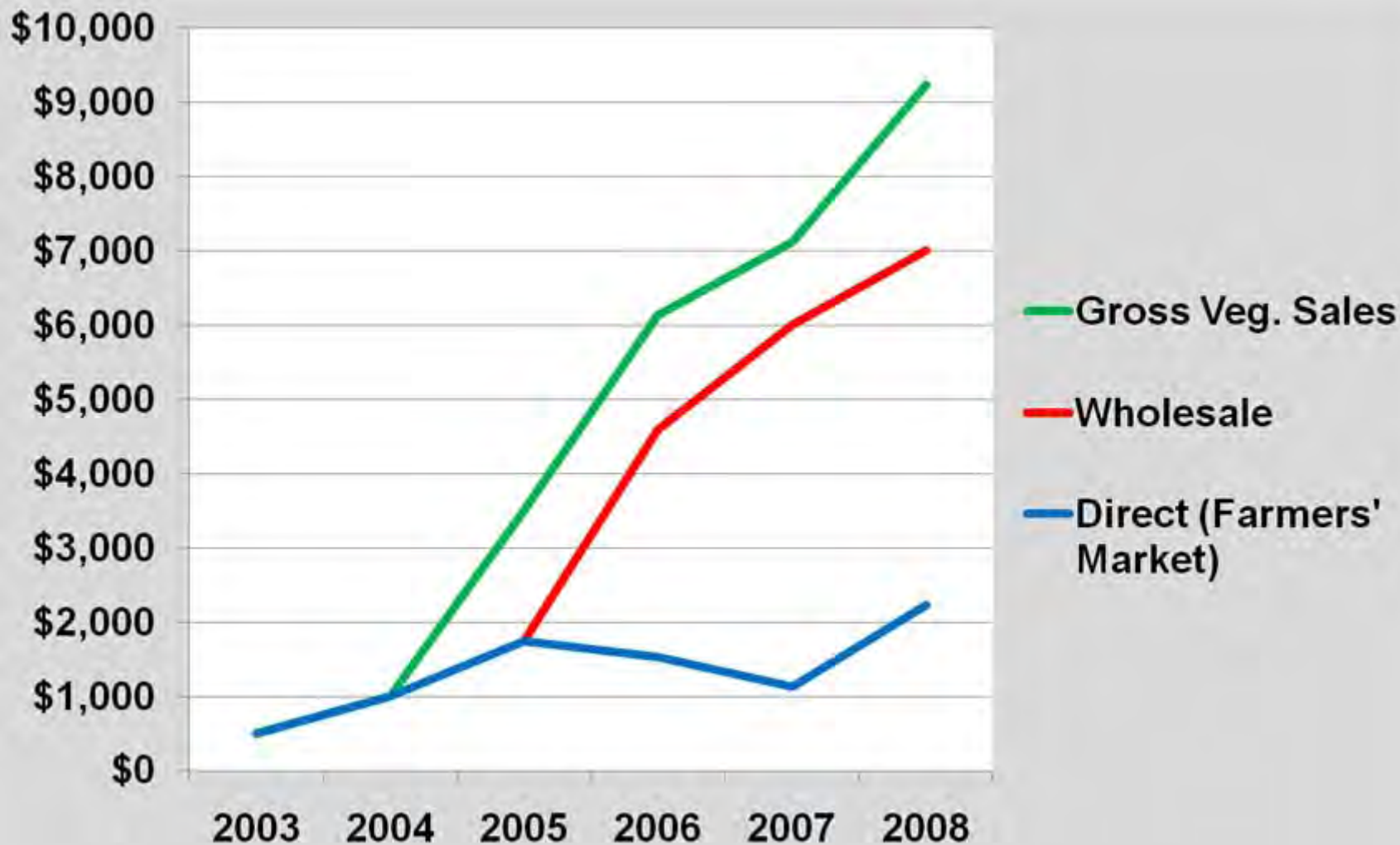


# Farm E: Gross Sales, Expenses, & Vegetable Income





# Farm E: Changes in Markets





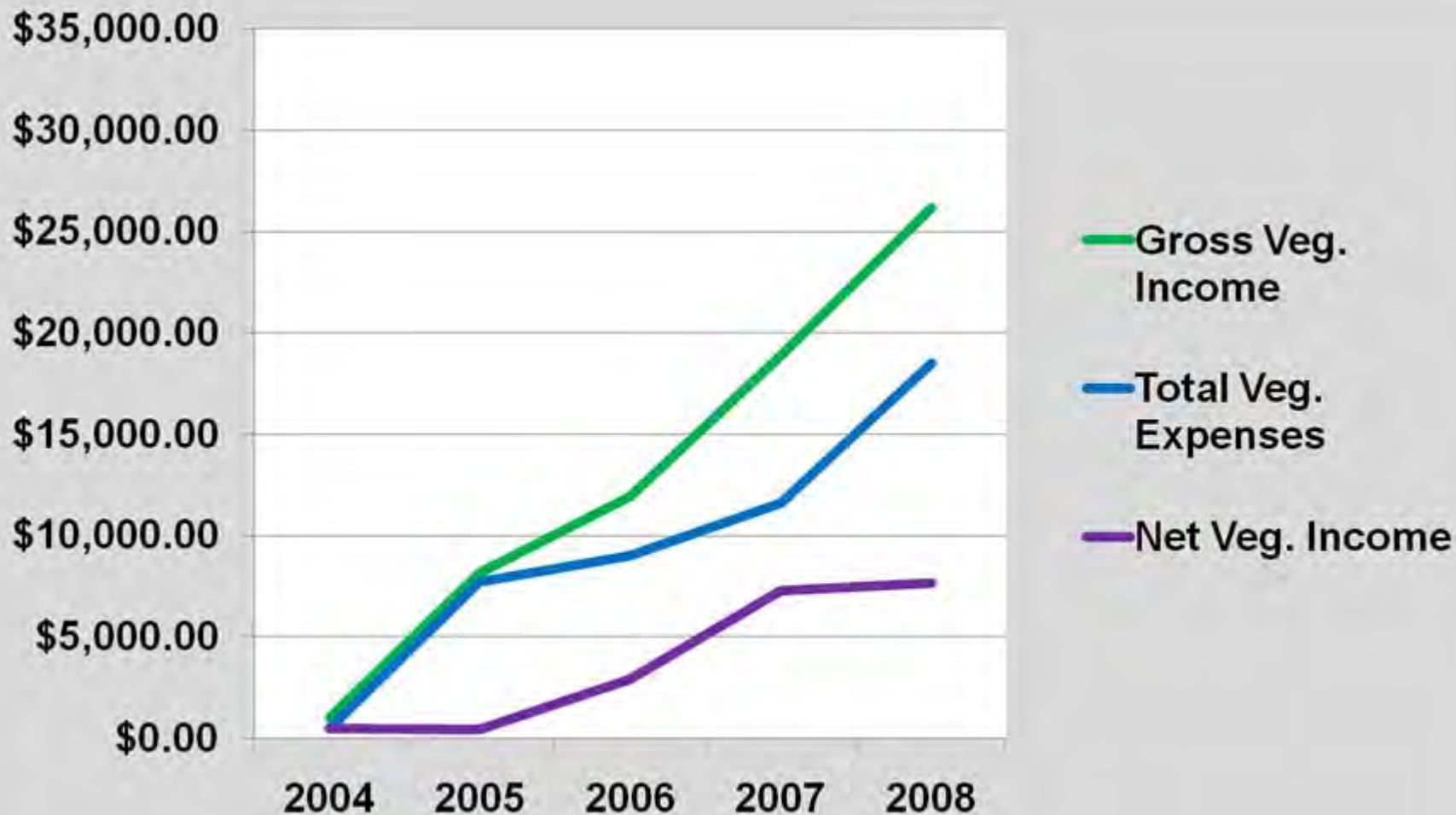
# Farm F

- Couple
- One off-farm job, also works on farm
- Ages: 40ish
- Enterprises: vegetables, poultry



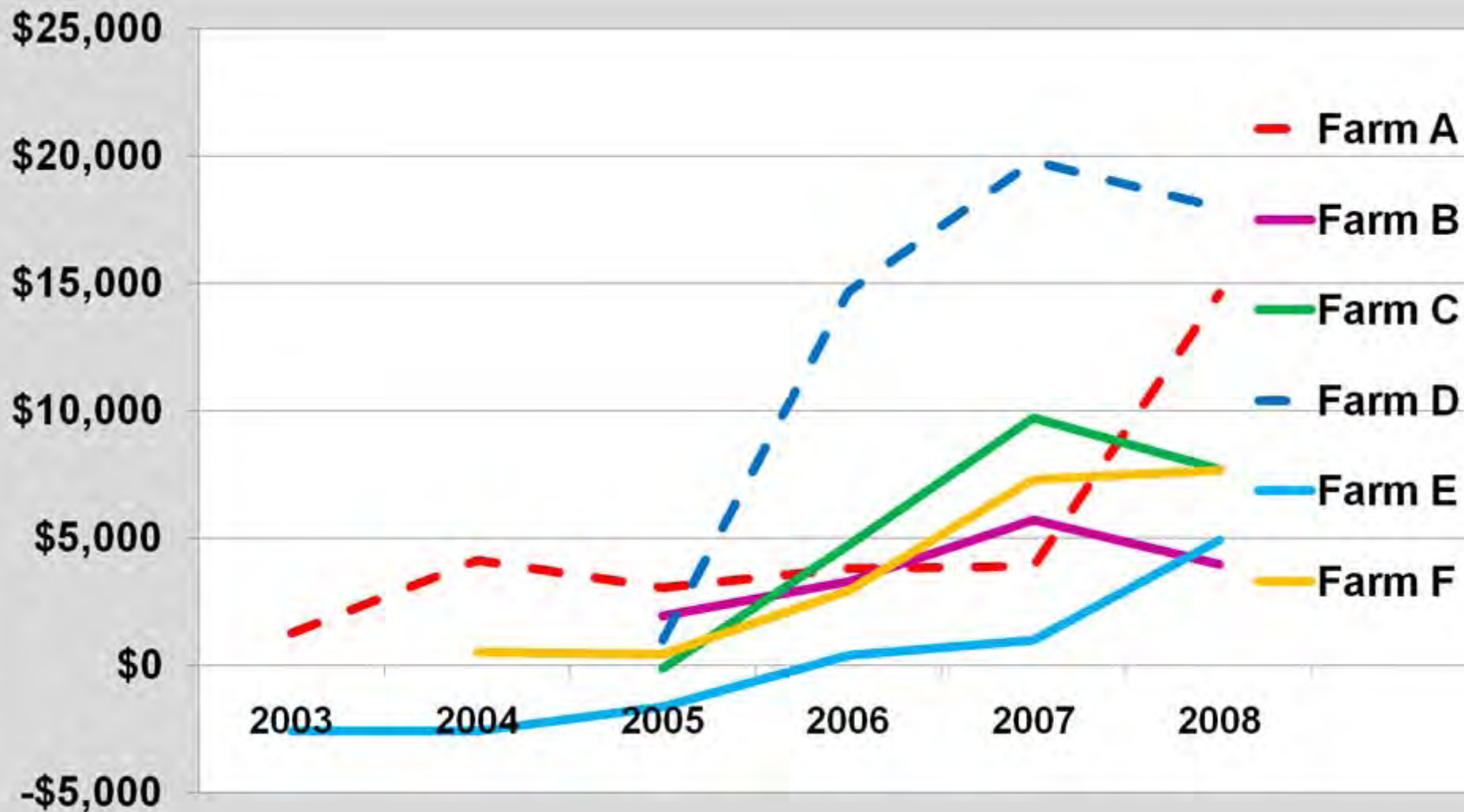


# Farm F





# Net Veg. Income + Depreciation of Six Upper-Midwestern Farms





# Net Veg. Income + Depreciation of Six Upper-Midwestern Farms

- After 4–6 year start-up, ranged from \$5,000 to \$18,000
- Income trend continued up for all farms
- Vegetable income lower for mixed-enterprise farms





# Six Upper-Midwestern Farms

Key summary questions asked:

1. What was best training or experience for starting your own operation?
2. What were a few of the biggest lessons you learned in your start-up years?
3. What are your plans for your business in the next five years?
4. What advice do you have to beginning, start-up vegetable growers?



# Six Upper-Midwestern Farms

## 1. What was best training or experience for starting your own operation?

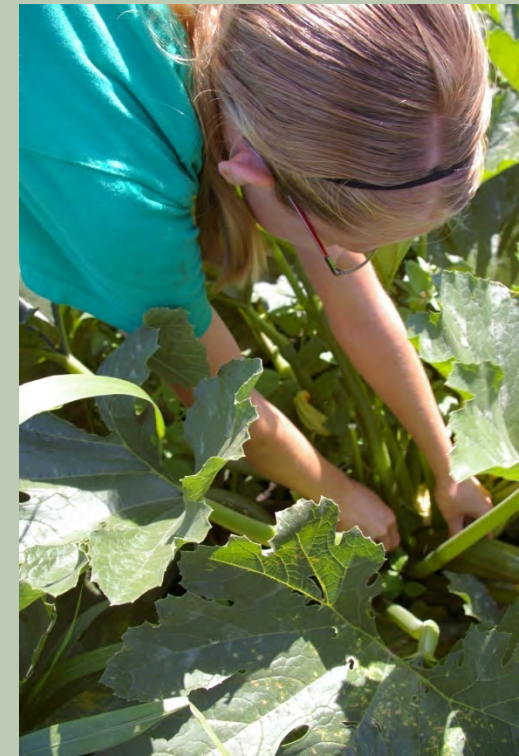
- Working for a salad growing operation and for an upscale retail nursery, as well as managing various non-profit organizations.
- Jumping in and doing it.
- Took a small business planning class—great help in planning and in building relationships.
- Involvement in state non-profits the working in sustainable agriculture and local foods
- Thinking about our farm as a small business.



# Six Upper-Midwestern Farms

## 1. What was best training or experience for starting your own operation?

- Farm Beginnings course to help develop beginning business plan, with support in the process from our Extension office.
- Lots of reading, observation and planning





# Six Upper-Midwestern Farms

## 2. Biggest lessons you learned in start-up?

- Focus on and continually adjust our marketing plan.
- It takes time—be patient.
- Go for quality over quantity—customers will be willing to pay for it.
- Diversify your farm between multiple vegetables and other revenue streams (eggs, honey, jam, hay, handmade goods).
- Focus and prioritize. We can't do everything we want to do.
- Developing a set of products that carry us through the season. Timing labor with sales.



# Six Upper-Midwestern Farms

## 2. Biggest lessons you learned in start-up?

- We would have liked to built the ponds, put in the watering system, built the greenhouses, and bought all the equipment in year one, but we didn't know at the time what we needed. So, we actually saved a lot of money by waiting to make purchases later when we knew what we wanted to do. Taking a slower more deliberate approach has worked well for us. The downside to this is that the labor has been really intense. That's the trade off—more capital investments and less labor or more labor and fewer capital investments. The latter path has worked for us, thus far.



# Six Upper-Midwestern Farms

## 3. What are your plans for your business in the next five years?

- Maintain a CSA membership from 100 to 120
- Continue to improve production, including use of more cover crops, companion crops, composting, pollinators, etc.
- Add a mobile high tunnel to reasonably extend our season (we are NOT interested in a 12-month season)
- To continue to expand meat, poultry, and produce to \$75,000 gross with 30 to 35 percent net. (~\$26,000/yr)
- Reduce off farm work and work more on farm.
- Grow CSA to 60 members.
- Build cabin or yurt for a B&B/experience—a small farm side business



# Six Upper-Midwestern Farms

## 4. What advice do you have to beginning, start-up vegetable growers?

- Think about your farming as a business and grow the farm like a small business.
- Labor is a major constraint, so think strategically and continuously about labor.
- If you don't like keeping records—do it anyway.
- Charge what your food is worth—and don't apologize!
- Never change your production system entirely. Always make changes in increments.
- Have an exit strategy for your business and for each component of your business.
- Make sure you pay yourself.



# Start-up Vegetable Operation

How to foster start-ups?



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